In this the fourth of the series, Kenneth Hill takes an in-depth look at one of our Members

A surprise telephone call from Louis Varney on 10th February 1997 almost coincided with my reading a letter contributed by him to the *LAST WORD* column of the August 1995 issue of *RadCom*, the Journal of the Radio Society of Great Britain. The letter dealt with the one time issue of artificial aerial transmitting licences (AA licences) available to 'budding radio amateurs' to allow them to build low power (10 watts) radio transmitters which were fed into a dummy load. Experimenters then had to write a thesis of their work to the Post Master General (PMG) - and should he approve, a full transmitting licence would be granted. Such was the climate of amateur radio in 1927.

Sixteen year old Louis (AA Licence 2ARV) and his friend, the late Jack Hum G5UM, (AA Licence 2AJI) were to spend nearly two years experimenting with galena, zincite and bornite crystals. A Russian engineer, M.O.V.Lossev, in an article published in the "Amateur Radio and Electric Journal", Vol. 5, of August 1924 claimed that, by applying a small positive or negative voltage to a galena, zincite or bornite crystal in a suitable LC circuit via a second cat's whisker, RF oscillation could be produced. Louis and Jack repeated this pioneering experimental work and succeeded in producing feeble oscillation. A thesis of their joint efforts was sent to the PMG and they were both awarded their "full" licences. Louis became G5RV and Jack G5UM. Louis comments: "Had we had a better knowledge of physics, we might have invented the transistor some 18 years before the Americans".

The scientific team of Bardeen, Shockley and Brittain of the Bell Laboratories USA invented the point transistor in 1948.

Louis was born on 9th June 1911 into a talented, middle-class family. His father, was an electrical engineer and manager of a large, well-established electrical manufacturing plant with world-wide connections. His mother; was a noted beauty of French descent and related to General Burgogne of bygone years. They raised their children in an atmosphere of music and sporting pursuits. Dad, an amateur boxer of some repute, taught the two boys to box, something Louis remembers well as this skill was useful during his school days. Dad also had musical talents: he played the violin. Louis' brother, two years his junior, served as an RSM in a Tank Recovery Unit in WW2, later became Head of a Department at Scotland Yard, and holds an OBE. Louis' sister Joan, who served in the WAAF in WW2, married an RAF Wing Commander. Unfortunately, he died 20 years ago.

Schooling for Louis began in a Preparatory School in Golders Green, then in Hendon Secondary School in London. He became a Boy Scout and learned signalling because he was fascinated by the Morse code. He quickly acquired his Signaller's badge and built his first crystal set when he was 11 years old. Happy hours were spent listening to radio amateurs on the 440m band. The family moved to Sunbury-on-Thames in 1924 and there Louis attended Hampton Grammar School. His favourite subjects were French and Spanish (he now speaks and writes those languages and Italian and Portuguese) and he also enjoyed chemistry, physics and carpentry. He played soccer, cricket and practised swimming. Louis was 13 years old when he joined the Sea Scouts at Hampton on Thames. His Scoutmaster was a retired Commander RN. Louis comments: "He was kind but very firm." Louis really enjoyed his sea training and he rapidly gained promotion to Patrol Leader, then King's Scout/Troop Leader. He participated in International Scout sailing contests, including crewing in a yacht race between Denmark and Sweden.

Louis left school in 1928. He was 17 years old. His first position was an apprenticeship to the electrical industry in the London maintenance workshop of J. H. Holmes & Co. (his father's employer) where he spent the next two years.

In 1930 he was invited to attend an interview with the Chief Engineer of the BBC. He was also approached by the Engineer-in Chief of the Marconi Company's Chelmsford Factory Test Department. Both offered him a post as Technical Assistant. He chose the latter and commenced training to become an Engineer. In 1933 Mr A.W. Ladner; Principal of the Marconi College, offered Louis the position of Chief Instructor - and during the next few years he taught pupils and Engineer students from all over the world. Louis remembers: "When WW2 broke out in 1939 we expected to set up special courses on the

operation and maintenance of radio equipment then in use by the three services." As those of us who served in the immediate pre-war days will remember; all three services ran extensive maintenance courses on communication equipment then in use. The RAF also sent technicians to the Marconi College on Courses relating to the Marconi equipment used by Bomber Command in WW2. Louis was selected in 1941 to become Chief Technical Assistant to Mr Sweny; Chief Engineer and Manager of the Marconi Co. Aeronautical Division; again assisting the RAF maintain their Marconi equipment.

In March 1942, Louis was granted an interview with Admiral Grant (Rt'd) then the General Manager of the Marconi Co. Louis asked special permission to be released from his service with the Marconi Company. He wanted to join the Royal Navy. He got a frosty reply from the Admiral: "How could the Company survive if all its engineers wanted to go off and fight?" Louis comments. "At this point in the interview I had a brainwave! I said to him: 'Admiral Grant, if you were a young man of my age and your country was at war, what would you want to do?' At this, he patted me on the back and said 'You win my Boy.' This meant my job and my pension would be secure should I survive the war." The pleasure of that moment of victory remains with him to this day, for, in the recounting of this story 55 years after the event, his eyes take on an extra sparkle and a broad grin spreads across his face. He got his interview with the Admiralty and was accepted for a Commission, but because of a hernia he was advised by the Navy doctor to have an operation as a civilian and then re-apply.

During his post-operation recovery period he received a phone call from a Major Keen, a world authority on Wireless Direction Finding and author of a textbook of that title, in the fourth edition of which Louis receives an honourable mention. Louis was invited to attend an interview with Brig. Gen. R. Gambier-Parry (G2DV). He was offered a Commission in a Unit designated SCU3 - HF Interception and DF - Royal Corps of Signals. Louis accepted this post as an assistant to Major Keen and in 1942 he joined SCU3 at Hanslope Park as a Second Lieutenant taking charge of the installation, calibration and maintenance of all SCU3 HF/DF stations in the UK. Rapid promotion to Captain soon followed. Louis comments: "Although the HF/DF stations were placed at strategic points in England, Scotland and Northern Ireland, we were non-combatant Units. Even so, all its officers were sent to the Welsh Guards Battle Training Unit to be put through a stiff course of training including the firing of automatic weapons - and the usual square-bashing!"

Demobbed in December 1946, Louis returned to Marconi and was given the choice of returning to the College or to work at the Gt. Baddow Research Laboratories. He chose the latter and worked on VHF, UHF and Microwave projects.

In 1954 he was offered the newly-created post of Marconi CO's Latin-American and Caribbean Area Technical and Commercial Representative, resident in Caracas, Venezuela .He accepted and, after a few months of commercial training, left the UK with his wife and son, 10 year old Peter, for Caracas. During his 3 years' residence there he made several visits to Marconi agents in his area of operations and was fortunate in obtaining amateur radio licences or special permission to operate as a guest operator at licensed amateur stations in many countries and the Caribbean Islands. {Ben: (AIII) comments: Louis - is a world traveller; having visited or lived in some 75 countries and who has owned about 55 callsigns. Because of his Marconi job he dealt directly with the Offices of Communications in the many countries he travelled to - hence a direct callsign issue.- Neat! No paperwork: No fees! Louis values his CX5RV callsign because of the happy memories it brings.)

In 1960 he was offered a job with the firm of Consulting Engineers, Preece Cardew and Ryder. They were seeking a fluent French-speaking, qualified Telecommunications Engineer to be resident in Paris for 3 years and to work with SHAPE on the Multi-European Defence Communication project codenamed "ACE HIGH". Louis accepted and lived with his wife in Paris. Peter was at boarding school in the UK.. Louis was responsible for overseeing and the pre-commissioning testing, then the commissioning testing and acceptance of stations in Italy, Sicily, Greece and Turkey. This project terminated in 1963.

Louis and his wife returned to the UK, but Louis continued his visits to many African countries. Tragically his wife died of cancer in 1965 after many years of very happy marriage. Louis was heartbroken and was glad of his heavy overseas workload to get him over this traumatic period.

For several years Louis had kept a sked with Tito (CX1BT) in Montevideo. When in 1966, his cousin, Nelida, told him she was about to visit several European countries including England, he gave her Louis' address and telephone number and suggested that she should telephone him.. She did and they met

several times in London for lunch together. Romance bloomed and in 1968 Nelida came to England again and she and Louis were married. (Ben comments: 'Nelida, his XYL is a most adorable person and an excellent hostess. I believe that she was an Assistant to a High Court Judge in Montevideo'.)

In 1969 Louis was posted to Antwerp to work on a special project for Supreme Headquarters Allied Powers in Europe (SHAPE). There he collected the callsign ON8RV. Louis and Nelida made many friends there.

In 1970 on completion of his work in Europe, Louis was posted to Papua, New Guinea based in the capital, Port Moresby, to work with a team of Australian PTT Engineers in the planning of an HF R/T system for Papua, that country being mostly mountainous and quite impractical to install and maintain a wire or cable system. Louis comments: "I was able to obtain an amateur radio licence from the Australian PTT Office before leaving the UK. My callsign was VK9LV. The Australian amateurs were a great lot, as were the PTT Engineers, technicians and their families. My work took me to Brisbane, Sydney, Newcastle, Melbourne and Adelaide. I took the opportunity to visit many radio amateurs and their families - all gave me and Nelida, a great welcome. There I was able to operate as VK9LV/4." Louis was a Member of the Wireless Institute of Australia (WIA) and soon qualified for the WIA DX Century Club Award.

On the completion of his work in Papua, he was due for 3 months' leave so he and Nelida decided to return to the UK "Island-hopping" across the Pacific; a journey of which he has fond memories. They had been invited to stay with friends in the New Hebrides where the callsign YJ8RV had been arranged for him and a station and antenna put at his disposal. Louis comments: "Whenever I called CQ, the pileups were fantastic". Two weeks later they moved on to Fiji for 2 days, then on to Tahiti where a special visitor's licence with the call FOORV had been arranged for him for the fortnight they were there. On their flight from Tahiti to Santiago, Chile, the plane touched down at Easter Island and they were given the opportunity to visit the enormous statues carved from solid rock by the natives centuries before. Then on to Santiago for a week's stay where he operated as G5RV/CE from the station of an old friend German Torres, CX3ED. Next came Argentina for a week where he met another old friend; Carlos Trench, LU8BA who had been one of his students at the Marconi College. He obtained special permission for him to operate as a guest operator at his station during their stay. There followed a short flight to Montevideo, where he met for the first time Nelida's family and friends. His old friend Tito (CX1BT) had arranged an interview for him with the Director of Telecommunications of Uruguay who agreed to grant him a radio amateur licence provided he passed the Technical Examination and Morse test in Spanish! This he did and as they knew they were going to stay in Punta del Este as they had been lent a house by friends of Nelida - and he also knew that the call sign sequence for the district of Maldonado was CX5, requested and was granted the callsign CX5RV. Louis remembers: "An amusing thing happened during the Morse test. I was asked to start sending by the examiner - but after I had sent the first few words, he stopped me, saying, 'Stop!, Stop! -You are sending too fast for me!' He also said; 'OK, You pass'. He joined the Radio Club of Uruguay and Tony CX8BBB lent his complete station equipment and G5RV antenna and helped him to install the station at Punta del Este.

They spent a month in Uruguay then flew to Rio de Janeiro where an old friend, Gilberto PY1AFA had obtained a visitor's licence for Louis with the callsign PY1ZAR which he used as a guest operator at the stations of his friends in Rio during their 2 weeks stay.

A flight to Paris followed where they spent an enjoyable week looking up old friends there and then Antwerp. Then back to their home in Sussex. One of Louis's great passions was horse riding. He gave that up when he was about 80 years old. Sadly his favourite horse was killed by lightning in a field on the Ranch in South America 3 years ago.

Ron (G0WGP) comments: "Louis is an artist of no mean ability. Be it in the field of oil painting, portraiture, still-life or landscape, he has a fine eye for colour, texture and draughtsmanship and his works abound on the walls of his home." In his shack, facing the operating area, framed certificates extend to the ceiling. Louis has just about every award you can think of. His rig is the Trio 530SP -and a Yaesu FL2100B linear. Ron further comments: "He has a paddle key of indeterminate age made by Brown Bros. of St Louis, Missouri. Model BTL. His logbook contains multi-coloured entries to distinguish unusual DX, particular friends and general QSOs. He rarely works SSB." Both Louis and Nelida enjoy *haute cuisine*; an art they learned during their years in Paris.

Ron continues: "This story would be incomplete without mention of That Antenna! This is surely an instance of necessity being the mother of invention. At the time of its design in 1946, Louis was living in a house at Stony Stratford with a garden barely 100ft long - and the need to install a multi-band antenna. Setting his mind to the problem, Louis came up with the what is now universally known as "the G5RV". Fifty years on, and the design is as popular as ever with a page in the 1997 ARRL Handbook saying the G5RV antenna is "gaining popularity in the USA." Commercial manufacturers have reaped huge financial rewards. Louis has never made a penny out of it. His satisfaction remains in propagating some splendid signals from the three G5RV's, one standard sized, one half-sized, one double-sized in his garden which look out on to the South Downs and beyond." I think Louis is very modest about his own creation - and too much of a gentleman to make comment.

He is a Founder member of FOC, 1947, Founder member RAOTA (UK) and a Member of RAOTC (Australia). He was a Member of RSGB Council during the 1960s and is President-for-life of the Mid-Sussex ARS. He published the article G5RV Multiband Antenna....Up-to-date in RadCom of July 1984, "HF antennas in theory and practice - a philosophical approach" having been published in RadCom September 1981.

It has been my privilege to work with Louis himself, G5RV-CX5RV, and Ron G0WGP and to have the assistance of Ben AI1I to make this article possible and I extend my sincere thanks to them all for their help. Ladies and Gentlemen, this is our world-renowned Member - Louis Varney, CEng., MIEE., AIL., RSARS/795.

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